

REMARKS

The Examiner is thanked for the thorough examination of the present application. The Office Action, however, continued to reject all claims 1-24. In response, Applicant submits the foregoing amendments and the following remarks. Applicant respectfully requests reconsideration and withdrawal of the rejections for at least the following reasons.

Response to Rejections under 35 U.S.C. 101

The Office Action rejected claims 1-12 under 35 U.S.C. § 101, as allegedly being directed to non-statutory subject matter. Applicant has amended claims 1 and 7 to overcome these rejections.

As the Examiner correctly noted, a recent Federal Circuit decision recently addressed the issue of rejections under 35 U.S.C. § 101. Indeed, the U.S. Court of Appeals for the Federal Circuit recently confirmed in its *In re Bilski* — F.3d —, 88 U.S.P.Q.2d 1385 (2008) decision:

“... we ... reaffirm that the machine-or-transformation test ... is the governing test for determining patent eligibility of a process under 35 U.S.C. § 101.

...

The machine-or-transformation test is a two-branched inquiry; an applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article.

The Court further stated:

In *AT&T*, we rejected a “physical limitations” test and noted that “the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter.” 172 F.3d at 1359 (*quoting State St.*, 149 F.3d at 1374). The same reasoning applies when the claim at issue recites fundamental principles other than mathematical algorithms.

Thus, the proper inquiry under § 101 is ... whether the claim meets the machine-or-transformation test. As a result, ... a claim that purportedly lacks any "physical steps" but is still tied to a machine or achieves an eligible transformation passes muster under § 101.

Independent claims 1 and 7, as amended, satisfy these legal standards.

With regard to claim 1, claim 1 is "tied to a machine," wherein the machine is a computer (i.e., "computer implemented method".) In addition, claim 1 has been amended to further recite the operation of "providing the target rule to a capacity allocation model that is implemented in a manufacturing-control computer for allocating capacity in a manufacturing method." Accordingly, the method of claim 1 is clearly tied to a machine, and therefore claim 1 defines statutory subject matter. With regard to the amendment made to claim 1, adding the last operation, this operation is described in the specification. For example, the last sentence in the summary of the invention section states: "The target rule is subsequently provided to a capacity allocation model for capacity allocation." Accordingly, the amendment adds no new matter to the application.

With regard to independent claim 7, claim 7 recites: "A computer-implemented apparatus of dynamic customer demand forecasting in a manufacturing environment, the computer-implemented apparatus comprising..." In this regard, claim 7 defines a "computer-implemented apparatus," which is a machine, and therefore satisfies the machine test of *In re Bilski*. Accordingly, claim 7 defines statutory subject matter and the rejection of claim 7 should be withdrawn.

Should the Examiner disagree, Applicant respectfully requests that any ensuing Office Action explain why these claims (as amended) do not satisfy the legal standards articulated by the Federal Circuit in *In re Bilski*.

Response to Rejections under 35 U.S.C. 103

Claims 1, 3-7, 9-13, 15-19 and 21-24 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Jenkins et al (Pub. No.: 2002/0188499). Claims 2, 8, 14 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Jenkins et al in view of Borders et al. (US Patent, No.: 7139721). Applicant respectfully traverses this rejection.

In order for a claim to be properly rejected under 35 U.S.C. §103(a), the teachings of the prior art reference must suggest all features of the claimed invention to one of ordinary skill in the art. See, e.g., *In re Dow Chemical*, 837 F.2d 469, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 642 F.2d 413, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981). Amendments are made to independent claims 1, 7, 13, and 19 to further specify the forecast rule, wherein the limitation "to estimate orders." This feature is disclosed in page 4 of the specification and therefore adds no new matter to the application. Claims 7, 13 and 19 are rejected on the same basis as claim 1. Therefore, remarks are provided regarding to patentability of the amended claim 1.

As stated in the Office Action (page 2), a preamble recites the purpose of a process or the intended use of a structure. Applicant notes that the teachings of Jenkins pertains to 'a system and method for *ensuring manufacturing order fulfillment*', and 'a system and method for *responding to supply conflicts*, such as unexpected delays in production, by *rerouting and reapplying resources*'(paragraph [0002], emphasis added). The teachings of Jenkins cannot achieve the purpose of claim 1, i.e., "dynamic customer demand forecasting".

The Office Action (page 3) states that Jenkins teaches the inputting of allocations to spread inventory to meet demand, and states that the 'prorating orders to meet demand' taught by Jenkins (para 30) is a rule applying to how the forecast is spread, and is therefore regarded a forecast rule. Accordingly, the Office Action states that Jenkins discloses "inputting at least one forecast rule".

According to the amended claim 1, the input forecast rule is used to estimate orders. On the contrary, according to the Office Action, the 'prorating orders to meet demand' taught by Jenkins (para 30) is a rule applying to how the forecast is spread. To one of ordinary skill in the art, the 'prorating orders to meet demand' is NOT a rule to estimate orders.

In addition, the Office Action (page 3) states that Jenkins discloses "inputting at least one forecast rule" in paragraph [0028], lines 1-4 and paragraph [0029], lines 1-3. According to Jenkins, 'In one embodiment, a user, when employing an external execution system to release production orders and vendor orders, may use a scheduling component 220 to provide input to that system' (see *e.g.*, paragraph [0028], lines 1-4); and 'After a planning period has begun, it can be assumed that the demand that was forecast for the period has begun to be realized.' (see *e.g.*, paragraph [0029], lines 1-3). First, to one of ordinary skill in the art, 'a user, when employing an external execution system to release production orders and vendor orders, may use a scheduling component 220 to provide input to that system' discloses a scheduling component 220 for inputting production orders and vendor orders. To one of ordinary skill in the art, the feature of 'inputting production orders and vendor orders' does not disclose do not disclose the "forecast rule to estimate orders" of claim 1.

Second, to one of ordinary skill in the art, 'After a planning period has begun, it can be assumed that the demand that was forecast for the period has begun to be realized' discloses that the demand has begun be realized after a planning period has begun. Whether the demand has begun to be realized has nothing to do with the "forecast rule to estimate orders" of claim 1. Accordingly, paragraph [0029] does not teaches the step of "inputting at least one forecast rule" of claim 1.

The Office Action (page 6) states that the 'orders' taught by Jenkins discloses "forecast hit rate" of claim 1, and 'accumulating orders' discloses "calculating forecast hit rate" of claim 1. Applicant disagrees. According to claim 1, the forecast hit rate corresponds to the forecast rule, and the forecast rule is used to estimate orders. According to the Office Action and Jenkins, the 'orders' taught by Jenkins is regarded as the "forecast hit rate" of claim 1. To one of ordinary skill in the art, 'orders' of Jenkins do not disclose the "forecast hit rate corresponding to the forecast rule to estimate orders" of claim 1.

The Office Action (page 3) further states that 'It is common knowledge in the prior art to calculate (i.e. accumulate) a forecast hit rate (i.e. orders) corresponding to a forecast rule when accumulating forecasted demand'. Applicant disagrees. According to Jenkins (see e.g., paragraph [0030], lines 7-10), 'The planning component 210 then accumulates forecasted demand--that is, the portion of the allocated forecast that occurs during the proration period for all forecast records'. In other words, according to Jenkins, 'forecasted demand' is 'the portion of the allocated forecast that occurs during the proration period for all forecast records'.

In contrast, according to claim 1, each “forecast hit rate” corresponds to a forecast rule to estimate orders. To one of ordinary skill in the art, the ‘forecasted demand’ (i.e., the portion of the allocated forecast that occurs during the proration period for all forecast records) of Jenkins does not disclose a “forecast hit rate” corresponds to a forecast rule to estimate orders. Actually, Jenkins teaches nothing about the “forecast rule to estimate orders” of claim 1, let alone calculating the forecast hit rate corresponding to the forecast rule.

For at least the foregoing reasons, the cited art does not suggest all features of the claim 1 to one of ordinary skill in the art. Accordingly, the rejection of claim 1 should be withdrawn. As claims 7, 13, and 19 were rejected on the same basis as claim 1, the rejections of these claims should be withdrawn for the same reasons. Insofar as all remaining claims depend from claim 1, 7, 13, or 19, all rejections should be withdrawn for the same reasons. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

For at least the foregoing reasons, it is believed that all pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

No fee is believed to be due in connection with this submission. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Deposit Account No. 20-0778.

Respectfully submitted,

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